Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604373N: Airborne Mine Countermeasures (AMCM)

,	,										
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	40.731	50.899	45.885	0.000	45.885	47.892	27.122	25.619	16.789	Continuing	Continuing
0529: ABN Mine Hunt System	2.423	4.739	7.139	0.000	7.139	3.940	4.663	4.666	3.444	Continuing	Continuing
2047: ALMDS	6.248	11.060	13.413	0.000	13.413	13.140	9.821	12.027	10.536	Continuing	Continuing
2427: OASIS	6.852	9.791	6.029	0.000	6.029	5.742	0.000	0.000	0.000	0.000	123.927
2473: Airborne Mine Neutralization System	19.831	20.026	16.597	0.000	16.597	22.324	9.869	6.088	0.000	0.000	296.947
4026: Strat Into Medal, Tactics & Trng Organic Force	2.716	1.938	1.798	0.000	1.798	1.820	1.846	1.895	1.845	Continuing	Continuing
9179: Surf Navy Integ Undersea Tactical Tech	0.666	0.955	0.909	0.000	0.909	0.926	0.923	0.943	0.964	Continuing	Continuing
9999: Congressional Adds	1.995	2.390	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.327

A. Mission Description and Budget Item Justification

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Airborne Mine Countermeasures (AMCM) programs will deploy to the fleet as sensors integrated into the MH-53E and MH-60S platforms in order to provide Mine-Like Object Detection/classification/localization, Mine Identification, mine reacquisition and neutralization, and influence clearance capabilities. The "Next Generation" AMCM systems will provide this set of capabilities to the Littoral Combat Ship (LCS) Mine Warfare Mission Module. This capability will be of critical importance in littoral zones, confined straits, choke points, and the Amphibious Objective Area (AOA). Some interest in the following areas has been expressed: search and rescue; surface fire support; ASW operations; protection/offense against small craft/vehicles; air to air operations; very shallow water MCM; swimmer defense and torpedo defense. Surface Navy Inegrated Undersea Tactical Technology (SNIUTT) will be used to develop an AN/SQQ-32, AN/AQS-14, AN/AQS-24 and AN/AQS-20A sensor training modules and future Organic Airborne Mine Countermeasures (OAMCM) Sensor Training Modules.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy		DATE: February 2010
	R-1 ITEM NOMENCLATURE PE 0604373N: Airborne Mine Countermeasures (AMCM)	
BA 5: Development & Demonstration (SDD)		

B. Program Change Summary (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	41.740	48.712	0.000	0.000	0.000
Current President's Budget	40.731	50.899	45.885	0.000	45.885
Total Adjustments	-1.009	2.187	45.885	0.000	45.885
 Congressional General Reductions 		-0.213			
 Congressional Directed Reductions 		0.000			
 Congressional Rescissions 	0.000	0.000			
 Congressional Adds 		2.400			
 Congressional Directed Transfers 		0.000			
Reprogrammings	0.000	0.000			
 SBIR/STTR Transfer 	-1.008	0.000			
 Program Adjustments 	0.000	0.000	45.885	0.000	45.885
 Rate/Misc Adjustments 	-0.001	0.000	0.000	0.000	0.000

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 9999: Congressional Adds

Congressional Add: Common Air Mine Countermeasures Tow Cable

Congressional Add: AIRBORNE MINE COUNTERMEASURES OPEN ARCHITECTURE TE

	FY 2009	FY 2010
	0.000	2.390
CTURE TE	1.995	0.000
Congressional Add Subtotals for Project: 9999	1.995	2.390
Congressional Add Totals for all Projects	1.995	2.390

Change Summary Explanation

FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.

DATE: February 2010

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APPROPRIATION/BUDGET ACTIV 1319: Research, Development, Tes BA 5: Development & Demonstration	t & Evaluatio	n, Navy		R-1 ITEM N PE 060437 Counterme		Mine		PROJECT 0529: ABN	Mine Hunt S	System	
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0529: ABN Mine Hunt System	2.423	4.739	7.139	0.000	7.139	3.940	4.663	4.666	3.444	Continuing	Continuing

A. Mission Description and Budget Item Justification

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Quantity of RDT&E Articles

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

This project includes a sonar for mine detection, classification and identification. The Navy does not possess a capability to conduct minefield reconnaissance (mine density and location) at high area search rates. The AN/AQS-20A is being developed to address the emergent requirements for mine identification and to integrate AMCM systems with a MH-60S platform. The AN/AQS-20A will also be the mine hunting sonar component for the Remote Minehunting System (RMS). The AN/AQS-20A will be developed to meet the requirements of the Littoral Combat Ship (LCS) Mine Warfare Mission Module.

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B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Acquisition Workforce	0.012	0.000	0.000	0.000	0.000
RDT&E Articles Quantity					
FY 2009 Accomplishments: Funded DoD Acquisition Workforce Fund.					
Accomplishments/Effort/Subtotal Cost: Support	0.611	0.387	0.429	0.000	0.429
RDT&E Articles Quantity					
FY 2009 Accomplishments: - Continued performance analysis identifying design efforts required to resolve interface problems - Began Tactics, Mission Planning and PMA during MH-60S OT phase - Completed Interface/integration with MH-60S, C4I Interface and MEDAL - Replenished deep minefield					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: Feb	ruary 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604373N: Airborne Mine Countermeasures (AMCM)		PROJECT 0529: ABN	Mine Hunt S	ystem	
B. Accomplishments/Planned Program (\$ in Millions)	,		1			
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: - Begin to develop ILS and supportability product and training - Continue Tactics, mission planning, and PMA during MH-609 - Continue to replenish deep minefield						
FY 2011 Base Plans: - Continue to develop ILS and supportability product and traini - Continue to replenish deep minefield	ing materials.					
Accomplishments/Effort/Subtotal Cost: Test and Evaluation		0.905	1.655	0.567	0.000	0.567
RDT&E Articles Quantity						
FY 2009 Accomplishments: - Restart MH-60S DT - Conducted testing on P3I improvements						
FY 2010 Plans: - Complete MH-60S DT - Begin MH-60S OT						
FY 2011 Base Plans: - Complete MH-60S OT						
Accomplishments/Effort/Subtotal Cost: Management Services		0.156	0.232	0.355	0.000	0.355
RDT&E Articles Quantity						
FY 2009 Accomplishments: - Began planning and management for the AN/AQS-20A progr	ram					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: Febr	ruary 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604373N: Airborne Mine Countermeasures (AMCM)		PROJECT 0529: ABN			
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
- Began documentation development in support of FRPDR	in FY09					
 FY 2010 Plans: Continue documentation development in support of FRPD Continue to provide planning and management for the AN FY 2011 Base Plans: Complete documentation development in support of FRPD Continue to provide planning and management for the AN 	/AQS-20A program DR in FY11					
Accomplishments/Effort/Subtotal Cost: Product Development		0.739	2.465	5.788	0.000	5.788
FY 2009 Accomplishments: - Began cable design improvement - Completed Ferrule Hydrodynamic design						
FY 2010 Plans: - Continue cable design improvement - Perform Environmental Data Collection analysis - Develop Automated Target Recognition						
FY 2011 Base Plans: - Continue Environmental Data Collection analysis - Continue Automated Target Recognition Development						
Ac	complishments/Planned Programs Subtotals	2.423	4.739	7.139	0.000	7.139

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R-1 Line Item #104 Page 5 of 64

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0604373N: Airborne Mine	0529: <i>ABN</i>	Mine Hunt System
BA 5: Development & Demonstration (SDD)	Countermeasures (AMCM)		

C. Other Program Funding Summary (\$ in Millions)

		-	FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	<u>Base</u>	OCO	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
OPN 4248: Airborne Mine	0.000	14.520	0.000	0.000	0.000	7.720	0.000	0.000	0.000	0.000	22.240
Countermeasure											
OPN 1600: LCS Mission Modules	0.000	21.780	22.650	0.000	22.650	23.160	23.700	24.294	49.800	Continuing	Continuing

D. Acquisition Strategy

AN/AQS-20A achieved Milestone C on 10 May 2005.

Sole Source to Raytheon of MH-60S systems LRIP procurement began in FY05, FY06 and FY07. Full Rate Production Decision Review (FRPDR) is expected in February 2011 with competitive contract award Q2 FY11.

E. Performance Metrics

Successfully complete Developmental Test/Operational Test.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT 0529: ABN Mine Hunt System

1319: Research, Development, Test & Evaluation, Navy

PE 0604373N: Airborne Mine Countermeasures (AMCM)

BA 5: Development & Demonstration (SDD)

Product Development (\$ in Millions)

				FY 2	2010		2011 ise	FY 20 OCC		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Hardware/Software Development Q-20 on the H-53	SS/CPIF	Raytheon Portsmouth, RI	31.120	0.000		0.000		0.000		0.000	0.000	31.120	Continuing
Hardware/Software Development Q-20A on the H-60	C/CPFF	Raytheon Portsmouth, RI	60.150	0.000		0.000		0.000		0.000	0.000	60.150	Continuing
Hardware/Software Development	WR	NSWC, PC Panama City FL	9.343	2.465	Nov 2009	5.788	Nov 2010	0.000		5.788	0.000	17.596	Continuing
Hardware/Software Development	C/FP	Northrop Grumman Not Specified	4.572	0.000		0.000		0.000		0.000	0.000	4.572	Continuing
		Subtotal	105.185	2.465		5.788		0.000		5.788	0.000	113.438	

Remarks

Support (\$ in Millions)

				FY 2	010	FY 2 Ba	-	FY 2 OC		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Services	WR	NSWC, PC Panama City, FL	30.304	0.337	Nov 2009	0.377	Nov 2010	0.000		0.377	Continuing	Continuing	Continuing
Engineering Services	C/CPFF	Raytheon Portsmouth, RI	3.686	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604373N: Airborne Mine

Countermeasures (AMCM)

PROJECT

0529: ABN Mine Hunt System

Support (\$ in Millions)

				FY 2	2010	FY 2 Ba	2011 ise	FY 2	2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Services	C/Various	Various VAR	54.018	0.000		0.000		0.000		0.000	0.000	54.018	Continuing
Engineering Services	SS/CPIF	Raytheon Portsmouth, RI	3.464	0.000		0.000		0.000		0.000	0.000	3.464	Continuing
ILS Function	WR	NSWC, PC Panama City FL	6.237	0.050	Nov 2009	0.052	Nov 2010	0.000		0.052	Continuing	Continuing	Continuing
ILS Function	SS/CPIF	Raytheon Portsmouth, RI	1.546	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
ILS Function	C/Various	Various VAR	0.981	0.000		0.000		0.000		0.000	0.000	0.981	Continuing
	Subtotal 100.236					0.429		0.000		0.429			

Remarks

Test and Evaluation (\$ in Millions)

				FY 2	2010	FY 2 Ba		FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
T&E Functions	WR	NSWC, PC Panama City FL	12.173	1.655	Dec 2009	0.567	Dec 2010	0.000		0.567	Continuing	Continuing	Continuing
T&E Functions	C/TBD	Raytheon Portsmouth, RI	4.134	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604373N: Airborne Mine

Countermeasures (AMCM)

PROJECT

0529: ABN Mine Hunt System

Test and Evaluation (\$ in Millions)

				FY 2	010	FY 2 Ba	-	FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
T&E Functions	C/Various	Various VAR	1.583	0.000		0.000		0.000		0.000	0.000	1.583	Continuing
		Subtotal	17.890	1.655		0.567		0.000		0.567			

Remarks

Management Services (\$ in Millions)

				FY 2	010	FY 2 Ba		FY 2	2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services	C/TBD	TBD TBD	4.258	0.207	Jan 2010	0.330	Jan 2011	0.000		0.330	Continuing	Continuing	Continuing
Travel	C/TBD	Various Various	0.529	0.025	Oct 2009	0.025	Oct 2010	0.000		0.025	Continuing	Continuing	Continuing
Acquisition Workforce Fund	Various/ Various	Various Various	0.012	0.000		0.000		0.000		0.000	0.000	0.012	Continuing
		Subtotal	4.799	0.232		0.355		0.000		0.355			

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604373N: Airborne Mine Countermeasures (AMCM)

PROJECT

0529: ABN Mine Hunt System

	Total Prior		2040		2011	FY 20		Cost To	Tatal Cast	Target Value of
	Years Cost	FY 2	2010	Ba	ise	OC	O Total	Complete	Total Cost	Contract
Project Cost Totals	228.110	4.739		7.139		0.000	7.139			

Remarks

Exhibit R-4, RDT&E Sche	dule	Prof	ile: F	PB 20	11 N	avy																DA	TE: F	ebrua	ary 20)10		
APPROPRIATION/BUDGE 1319: Research, Developm BA 5: Development & Dem	nent,	Test	& Ev		ion, N	lavy				PE	0604	M NO 373N meas	I: <i>Airk</i>	orne	Mine					PRO. 0529			e Hur	nt Sys	tem			
Fiscal Year		20	09			20	10			20)11			20	12			20	13			20	14			20	15	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Acquisition Milestones										Δ	1	P Deci IOC																
Development Phase	AN/AQS-20A P3I																											
Test & Evaluation Milestones			V		MH-6 DT																							
Operational Test								7	MH-60 OT	7 																		
Production Milestones LRIP I, II & IIa	Α	N/AQS	S-20A	LRIP	I, II, &	lla		7																				
(FY 05, FY06 & FY07) Full Rate Production																	AN/A	QS-20	A Fu	ıll Rate	Produ	ction						
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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy
BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE
PE 0604373N: Airborne Mine
Countermeasures (AMCM)

DATE: February 2010

PROJECT
0529: ABN Mine Hunt System

Schedule Details

	St	art	End	
Event	Quarter	Year	Quarter	Year
AN/AQS-20A/MH-60S DT	3	2009	3	2010
AN/AQS-20A/MH-60S OT	1	2011	1	2011
Low Rate Intial Production I & II	1	2009	4	2010
Full Rate Production Decision	2	2011	2	2011
IOC	3	2011	3	2011
AN/AQS-20A P3I	1	2009	4	2015
AN/AQS-20A Full Rate Production	3	2011	4	2015

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY
1319: Research, Development, Test & Evaluation, Navy

PE 0604373N: Airborne Mine
2047: ALMDS

BA 5: Development & Demonstration (SDD)

Countermeasures (AMCM)

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2047: ALMDS	6.248	11.060	13.413	0.000	13.413	13.140	9.821	12.027	10.536	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Airborne Laser Mine Detection System (ALMDS), designation AN/AES-1, is a light detection and ranging (LIDAR) Airborne Mine Countermeasures (AMCM) high area coverage system that detects, classifies, and localizes floating and near-surface, moored sea mines. The system is deployed from the MH-60S helicopter and will provide organic airborne mine defense to the battle force. The system represents a capability that does not exist in the current Mine Countermeasures (MCM) inventory.

ALMDS first spiral development phase, very shallow water capability, begins in FY2016.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Acquisition Workforce:	0.031	0.000	0.000	0.000	0.000
FY 2009 Accomplishments: Funded DoD Acquisition Workforce Fund.					
Hardware and Software technology development and demonstration/Engineering Services:	2.778	9.246	3.054	0.000	3.054
TDA Engineering/oversight/support of engineering efforts to meet baseline performance and full performance.					
FY 2009 Accomplishments: Post test engineering associated with Increment 1 Baseline					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY
1319: Research, Development, Test & Evaluation, Navy
BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE
PE 0604373N: Airborne Mine
Countermeasures (AMCM)

PROJECT
2047: ALMDS

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY10-FY11 Implement Increment 1 Software fix, model and analayze fix.					
FY 2011 Base Plans: FY10-FY11 Implement Increment 1 Software fix, model and analayze fix.					
Integrated Logistics Support:	0.058	0.423	0.673	0.000	0.673
FY 2009 Accomplishments: Training associated with OT IIA					
FY 2010 Plans: All TDA support of ILS Program, to include operator training, NATOPS documentation updates, and tech/maintenance manual updates.					
FY 2011 Base Plans: Upgrades to all training and logistics documentation.					
Testing and Evaluation:	3.258	0.000	7.957	0.000	7.957
FY 2009 Accomplishments: Completion of DT-IIE and OT-IIA OPEVAL.					
FY 2011 Base Plans: Completion of DT-IIE and OT-IIA OPEVAL.					
Project Management:	0.123	1.391	1.729	0.000	1.729
FY 2009 Accomplishments: TDA Program Management, Financial Management and Contractor support.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE
PE 0604373N: Airborne Mine
Countermeasures (AMCM)

PROJECT 2047: ALMDS

B. Accomplishments/Planned Program (\$ in Millions)

FY 200	9 FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: TDA Program Management, Financial Management and Contractor support.				
FY 2011 Base Plans: TDA Program Management, Financial Management and Contractor support.				
Accomplishments/Planned Programs Subtotals 6.2	11.060	13.413	0.000	13.413

C. Other Program Funding Summary (\$ in Millions)

			FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	Base	OCO	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
OPN 4248: Airborne MCM	6.252	22.300	14.800	0.000	14.800	24.400	11.000	0.000	0.000	0.000	78.752
OPN 1600: LCS Mission Modules	0.000	7.433	7.100	0.000	7.100	8.300	11.000	11.275	11.557	0.000	56.665

D. Acquisition Strategy

The first LRIP lot of two units was awarded as a new sole-source contract to the SD&D contractor in FY05. This is a Fixed-Price Incentive (FPI) contract with cost and schedule incentives. The March 2006 Program Review decision memorandum approved the ALMDS Program for LRIP 2 procurement of two units for FY07 pending successful demonstration of Engineering Change Proposal (ECP) I performance during DT-IID; DT-IID Phase B was conducted on an SH-60F helicopter and DT-IID phase C will be conducted on an MH-60S helicopter.

E. Performance Metrics

Successfully complete DT-IIE 3 and Operational Test (OT) and receive full rate production decision approval.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

R-1 ITEM NOMENCLATURE

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

PE 0604373N: Airborne Mine

Countermeasures (AMCM)

PROJECT 2047: *ALMDS*

Product Development (\$ in Millions)

				FY 2	010	FY 2 Ba	-	FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Hardware/Software Development	WR	NSWC PC Panama City FL	0.661	0.281		0.000		0.000		0.000	0.000	0.942	Continuing
Hardware/Software Development	MIPR	Prime Contractor Not Specified	24.261	4.800	Nov 2009	0.000	Nov 2009	0.000		0.000	0.000	29.061	Continuing
Hardware/Software Development	MIPR	Metron Not Specified	0.625	0.458	Nov 2009	0.000		0.000		0.000	0.000	1.083	Continuing
Hardware/Software Development	MIPR	SAIC Not Specified	0.200	0.000		0.000		0.000		0.000	0.000	0.200	Continuing
Engineering Services1	WR	NSWC PC Panama City FL	11.394	0.308	Nov 2009	0.563	Nov 2010	0.000		0.563	Continuing	Continuing	Continuing
Engineering Services2	MIPR	Prime Contractor Not Specified	16.095	0.077	Nov 2009	0.126	Nov 2010	0.000		0.126	0.000	16.298	Continuing
Engineering Services3	C/Various	Various Various	9.755	3.160	Nov 2009	2.203	Nov 2010	0.000		2.203	Continuing	Continuing	Continuing
Engineering Services4	MIPR	Various Various	3.922	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
Engineering Services5	MIPR	Metron/Arete Not Specified	0.700	0.162		0.162		0.000		0.162	0.000	1.024	Continuing
		Subtotal	67.613	9.246		3.054		0.000		3.054			

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604373N: Airborne Mine Countermeasures (AMCM)

PROJECT 2047: *ALMDS*

Support (\$ in Millions)

				FY 2	010	FY 2 Ba		FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
ILS Functions1	WR	NSWC PC Panama City FL	1.998	0.423		0.673	Nov 2009	0.000		0.673	Continuing	Continuing	Continuing
ILS Functions2	WR	NSWC PC (Prime Contractor) Panama City FL	5.725	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
ILS Functions3	C/Various	Various/NRL Stennins VAR	1.062	0.000		0.000		0.000		0.000	0.000	1.062	Continuing
ILS Functions4	WR	NSWC PC Panama City FL	0.300	0.000		0.000	Nov 2010	0.000		0.000	0.000	0.300	Continuing
		Subtotal	9.085	0.423		0.673		0.000		0.673			

Remarks

Test and Evaluation (\$ in Millions)

				FY 2	2010	FY 2 Ba		FY 2 OC		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Testing and Evaluation	C/TBD	NSWC PC (Prime Contractor) Panama City FL	12.917	0.000	Nov 2009	1.650	Nov 2010	0.000		1.650	Continuing	Continuing	Continuing
Testing and Evaluation	WR	NSWC PC Panama City FL	14.359	0.000	Nov 2009	3.671	Nov 2010	0.000		3.671	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

R-1 ITEM NOMENCLATURE

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

PE 0604373N: Airborne Mine

PROJECT 2047: *ALMDS*

BA 5: Development & Demonstration (SDD)

Countermeasures (AMCM)

Test and Evaluation (\$ in Millions)

				FY 2	010	FY 2 Ba		FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Testing and Evaluation	C/Various	Various VAR	0.992	0.000	Nov 2009	0.902	Nov 2010	0.000		0.902	0.000	1.894	Continuing
Testing and Evaluation	WR	NAWC AD PAX Panama City FL	0.376	0.000	Nov 2009	1.734	Nov 2010	0.000		1.734	0.000	2.110	Continuing
		Subtotal	28.644	0.000		7.957		0.000		7.957			

Remarks

Management Services (\$ in Millions)

				FY 2	2010	FY 2 Ba		FY 2 OC		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Support1	Various/ Various	Various Not Specified	1.993	0.050	Nov 2009	0.050	Nov 2010	0.000		0.050	0.000	2.093	Continuing
Management Support2	WR	NSWC PC Panama City FL	2.247	1.341	Nov 2009	1.679	Nov 2010	0.000		1.679	0.000	5.267	Continuing
Management Support3	WR	NSWC PC Panama City FL	1.559	0.000	Nov 2009	0.000	Nov 2010	0.000		0.000	0.000	1.559	Continuing
DAWDF	C/TBD	Not Specified Not Specified	0.031	0.000		0.000		0.000		0.000	0.000	0.031	Continuing
		Subtotal	5.830	1.391		1.729		0.000		1.729	0.000	8.950	

Remarks

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE PE 0604373N: Airborne Mine

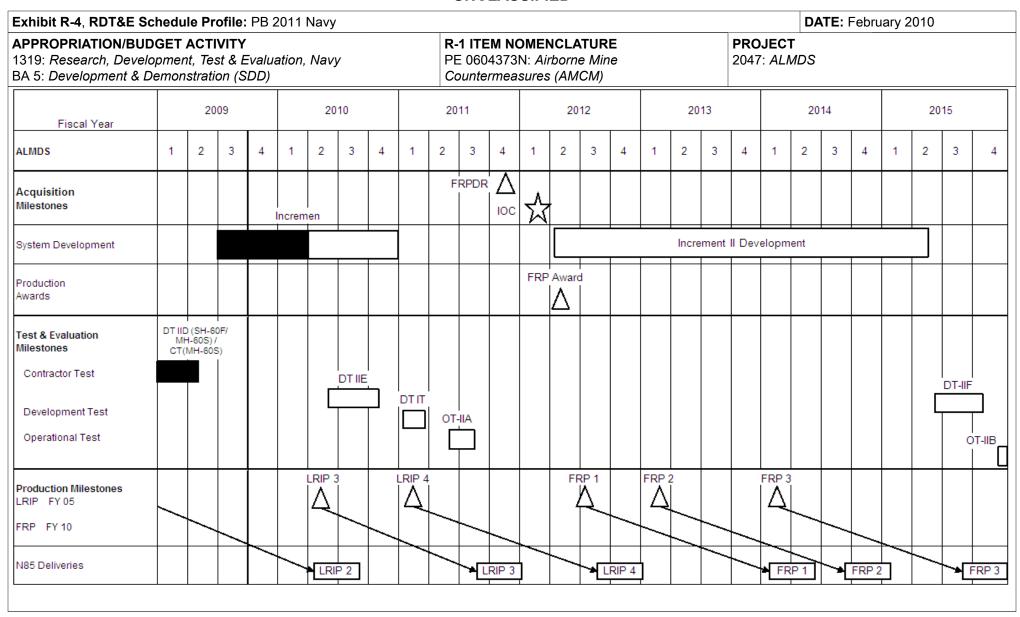
Countermeasures (AMCM)

PROJECT

2047: ALMDS

	Total Prior Years Cost	FY 2010	FY 2	FY 2	-	FY 2011 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	111.172	11.060	13.413	0.000		13.413	•		

Remarks



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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604373N: Airborne Mine

Countermeasures (AMCM)

PROJECT

2047: *ALMDS*

Schedule Details

	Sta	art	En	d
Event	Quarter	Year	Quarter	Year
CT/DT IID	1	2009	2	2009
Increment I Development	3	2009	4	2010
Increment II Development	2	2012	2	2015
Full Rate Production Decision	4	2011	4	2011
IOC	1	2012	1	2012
LRIP 2 Units Deliveries	2	2010	3	2010
LRIP 3 Units start	2	2010	2	2010
LRIP 3 Units Delivery Start	3	2011	4	2012
LRIP 4 Units start	1	2011	1	2011
LRIP 4 Units Delivery Start	3	2012	4	2012
Full Rate Production (FRP) Start (FRP 1)	3	2012	3	2012
Full Rate Production (FRP) Start (FRP 2)	1	2013	1	2013
Full Rate Production (FRP) Start (FRP 3)	1	2014	1	2014
Full Rate Production Delivery Start (FRP 1)	1	2014	2	2014
Full Rate Production Delivery Start (FRP 2)	3	2014	1	2015
Full Rate Production Delivery Start (FRP 3)	3	2015	4	2015
DT-IIE	2	2010	4	2010
OT-IIA OPERATIONAL TESTING (OPEVAL)	2	2011	3	2012

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604373N: Airborne Mine

Countermeasures (AMCM)

PROJECT

2047: ALMDS

	St	art	End		
Event	Quarter	Year	Quarter	Year	
DT-IIF	2	2015	4	2015	
OT-IIB OPERATIONAL TESTING (OPEVAL)	4	2015	4	2015	
DT-IT	1	2011	1	2011	

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE : February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
1319: Research, Development, Test & Evaluation, Navy	PE 0604373N: Airborne Mine	2427: OASIS

BA 5: Development & Demonstration (SDD)

Countermeasures (AMCM)

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2427: OASIS	6.852	9.791	6.029	0.000	6.029	5.742	0.000	0.000	0.000	0.000	123.927
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Organic Airborne and Surface Influence Sweep (OASIS) system is a towed Minesweeping System to be deployed from specially configured MH-60S helicopters. The system provides a rapid response sweeping capability against bottom and moored, buried, acoustic and magnetic, or combination acoustic/magnetic influence mines in support of mine clearance operations where mine hunting is ineffective. The system consists of a towed body, tow and sweep cable systems, power inverter, power distribution unit and storage/shipping containers. System interfaces with the MH-60S helicopter via the carriage, stream, tow and recovery system and the common console. The program is currently in the SD&D phase where three Engineering Development Models (EDMs) are being developed for test and evaluation. Areas of interest for program enhancement include but are not limited to the following: A) Real-time Mission Planning B) Threat Emulation Jamming C) Improved Power Inverter D) Light weight winch drive-train E) Improved magnetic performance.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Acquisition Workforce	0.034	0.000	0.000	0.000	0.000
FY 2009 Accomplishments: Funded DoD Acquisition Workforce Fund.					
Product Development:	0.827	0.867	0.441	0.000	0.441
FY 2009 Accomplishments: Continue OASIS EDM development work issues including corrosion, forward electrode, and AFT Sweep Cable Conduct CDR for Body Mount lectrode BME design Investigate and improve sweep cable component life Prepare EDMs for Operational Assessmenyt and MH-60 CT					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604373N: Airborne Mine Countermeasures (AMCM)		PROJECT 2427: OASI	S		
B. Accomplishments/Planned Program (\$ in Millions)			1			
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: Continue EDM development through MH-60 CT MS C Review FY 2011 Base Plans: Prepare EDMs for DT and OT						
Engineering and ILS:		4.773	5.423	3.050	0.000	3.050
FY 2009 Accomplishments: Engineering and ILS support for ORCA contract Office of Naval Research program support Support for development of OASIS Maintenance Test Sets Analysis of MIL-STD 704A Testing Issues						
FY 2010 Plans: Office of Naval Research program support Engineering and ILS support for Operational Assessment Engineering and ILS BME Design and Development						
FY 2011 Base Plans: Office of Naval Research program support Engineering and ILS support for CT and DT						
Testing: FY 2009 Accomplishments: Begin Environmental Testing		0.765	3.039	2.093	0.000	2.093

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604373N: Airborne Mine Countermeasures (AMCM)	PROJECT 2427: OAS	IS
B. Accomplishments/Planned Program (\$ in Millions)			

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans:					
Conduct Operational Assessment					
Conduct MH60 Worthiness Testing					
FY 2011 Base Plans:					
Conduct Training for WSIT CT					
Program Management	0.453	0.462	0.445	0.000	0.445
FY 2009 Accomplishments:					
Monitor contractor progress with regard to schedule, cost, and technical status management					
Monitor contractor CDRL and other deliverables					
FY 2010 Plans:					
Monitor contractor progress with regard to schedule, cost, and technical status management					
Monitor contractor CDRL and other deliverables					
FY 2011 Base Plans:					
Monitor contractor progress with regard to schedule, cost, and technical status management					
Monitor contractor CDRL and other deliverables					
Accomplishments/Planned Programs Subtotals	6.852	9.791	6.029	0.000	6.029

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0604373N: Airborne Mine	2427: OASI	IS
BA 5: Development & Demonstration (SDD)	Countermeasures (AMCM)		

C. Other Program Funding Summary (\$ in Millions)

		-	FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	<u>Base</u>	OCO	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
• OPN 4248: Airborne MCM -	0.000	0.000	0.000	0.000	0.000	9.400	11.200	11.300	8.500	16.000	56.400
OASIS											
OPN 1600: LCS Mission Modules	0.000	0.000	0.000	0.000	0.000	2.600	2.600	2.732	2.800	51.200	61.932

D. Acquisition Strategy

After Milestone B review in FY02, a SD&D contract was awarded. In FY07, the program successfully completed MH-53 CT and Tower Testing. An Operational Assessment is planned for FY09 MH-60 CT in FY10 and the DT and OPEVAL in FY11.

E. Performance Metrics

Successfully complete contractor test on the Body Mounted Electrode (BME) design and receive Milestone C approval.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

1 ITEM NOMENCLATURE PROJECT

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE PE 0604373N: Airborne Mine

Countermeasures (AMCM)

2427: OASIS

Product Development (\$ in Millions)

				FY 2	2010	FY 2 Ba		FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Hardware/Software Development	C/CPFF	EDO Corp. Not Specified	1.722	0.527	Nov 2009	0.030	Nov 2010	0.000		0.030	0.000	2.279	Continuing
Hardware/Software Development for BME	C/CPIF	EDO Corp. Not Specified	12.689	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
Hardware/Software Development	SS/CPFF	Aeptec Microsystems Inc. Not Specified	5.898	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
Hardware/Software Development	WR	NSWC PC Panama City FI	0.425	0.340	Nov 2009	0.411	Nov 2010	0.000		0.411	0.000	1.176	Continuing
		Subtotal	20.734	0.867		0.441		0.000		0.441			

Remarks

Support (\$ in Millions)

				FY 2	2010	FY 2 Ba	-	FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Services	WR	NUWC Keyport Keyport, WA	0.659	0.000		0.000		0.000		0.000	0.000	0.659	Continuing
Engineering Services	C/CPIF	EDO Corp. C/CPIF	15.053	1.411	Nov 2009	0.811	Nov 2010	0.000		0.811	Continuing	Continuing	Continuing
Engineering Services	WR	NSWC PC Panama City FI	15.350	2.437	Nov 2009	1.123	Nov 2010	0.000		1.123	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

R-1 ITEM NOMENCLATURE PROJECT

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

PE 0604373N: Airborne Mine Countermeasures (AMCM)

2427: OASIS

Support (\$ in Millions)

				FY 2	2010	FY 2		FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Services	WR	NSWC Carderock MD Bathesda, MD	0.300	0.000		0.000		0.000		0.000	0.000	0.300	Continuing
Engineer Services/ILS	C/Various	Various VAR	0.548	0.000		0.000		0.000		0.000	0.000	0.548	Continuing
Engineering Services	WR	ONR Not Specified	8.595	0.925	Nov 2009	0.440	Nov 2010	0.000		0.440	0.499	10.459	Continuing
ILS Functions	C/CPIF	EDO Corp. Not Specified	4.525	0.200	Nov 2009	0.497	Nov 2010	0.000		0.497	0.195	5.417	Continuing
ILS Functions	WR	NSWC, PC Panama City FI	2.736	0.450	Nov 2009	0.179	Nov 2010	0.000		0.179	0.412	3.777	Continuing
		Subtotal	47.766	5.423		3.050		0.000		3.050			

Remarks

Test and Evaluation (\$ in Millions)

				FY 2	2010	FY 2 Ba		FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
T&E Functions	C/CPIF	EDO Corp C/CPIF	7.668	0.124	Nov 2009	0.386	Nov 2010	0.000		0.386	Continuing	Continuing	Continuing
T&E Functions	WR	NSWC PC Panama City FL	13.055	2.915	Nov 2009	1.707	Nov 2010	0.000		1.707	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604373N: Airborne Mine

Countermeasures (AMCM)

PROJECT

2427: OASIS

Test and Evaluation (\$ in Millions)

				FY 2	010	FY 2 Ba	-	FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
T&E Functions	C/Various	Various VAR	0.554	0.000		0.000		0.000		0.000	0.000	0.554	Continuing
	-	Subtotal	21.277	3.039		2.093		0.000		2.093			

Remarks

Management Services (\$ in Millions)

				FY 2	2010	FY 2 Ba	-	FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services	C/Various	Various VAR	5.678	0.432	Nov 2009	0.410	Nov 2010	0.000		0.410	Continuing	Continuing	Continuing
Travel	C/TBD	NAVSEA Washington, DC	0.310	0.030	Nov 2009	0.035		0.000		0.035	Continuing	Continuing	Continuing
Acquisition Workforce Fund	Various/ Various	Various Various	0.034	0.000		0.000		0.000		0.000	0.000	0.034	Continuing
		Subtotal	6.022	0.462		0.445		0.000		0.445			

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT 2107 0.4070

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

PE 0604373N: Airborne Mine Countermeasures (AMCM)

2427: OASIS

	Total Prior				2011	FY 2011	FY 2011	Cost To		Target Value of
	Years Cost	FY 2	2010	Ba	ise	oco	Total	Complete	Total Cost	Contract
Project Cost To	otals 95.799	9.791		6.029		0.000	6.029			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Navy **DATE:** February 2010 **PROJECT** APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE** PE 0604373N: Airborne Mine 2427: OASIS 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD) Countermeasures (AMCM) 2009 2010 2013 2014 2015 2011 2012 Fiscal Year OASIS 3 3 3 4 BME MSIC IOC Acquisition CDR LRIP Milestones Pre Milestone System Development OAMH-53 Test & Evaluation ct MH-60S Milestones Contractor Test DT MH-60 Development Test /Opel/al Operational Test Production Milestones FRP CA LRIP CA

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE
PE 0604373N: Airborne Mine

Countermeasures (AMCM)

PROJECT

2427: OASIS

Schedule Details

	Sta	art	Er	ıd
Event	Quarter	Year	Quarter	Year
BME CDR	2	2009	2	2009
MH-53 OA	3	2010	3	2010
CT MH-60s Testing	4	2010	3	2011
DT Testing	3	2011	2	2012
OPEVAL	2	2012	3	2012
Milestone C (LRIP)	4	2011	4	2011
Pre Milestone PRR	2	2011	2	2011
LRIP Contract Award	1	2012	1	2012
FRP Contract Award	1	2013	1	2013
Initial Operational Capability (IOC)	4	2013	4	2013

DATE: February 2010

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			R-1 ITEM NOMENCLATURE PE 0604373N: Airborne Mine Countermeasures (AMCM)				PROJECT 2473: Airborne Mine Neutralization System				
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2473: Airborne Mine Neutralization System	19.831	20.026	16.597	0.000	16.597	22.324	9.869	6.088	0.000	0.000	296.947

A. Mission Description and Budget Item Justification

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

AMNS will provide the MH-60S helicopter with the capability to neutralize bottom and moored mines using an expendable mine neutralization device. The AMNS is being tested on the MH-53E helicopter to prove out the neutralization effectiveness. The system will be deployed from the MH-60S helicopter as part of the Littoral Combat Ship (LCS) Mine Warfare Mission Module. This capability will be of critical importance in littoral zones, confined straits, choke points, and the Amphibious Objective Area (AOA). Development of an Untethered Launch and Handling System (LHS) for AMNS will occur in FY11-FY15.

The AN/AWS-2 Rapid Airborne Mine Clearance System (RAMICS) MIW program began Concept & Technology Development phase in FY00. RAMICS will satisfy the U.S. Navy's need for a rapid mine clearance capability required to neutralize near-surface and surface (floating) moored sea mines. RAMICS will use geo-location data provided by other mine hunting and mine reconnaissance systems, use a laser system to reacquire targets and to direct the fire of supercavitating projectiles that will render the mines inoperable. RAMICS includes the following major subsystems:

- (a) Gun Subsystem (including gun and turret)
- (b) Munition Subsystem MK258 Mod 1 Armor Piercing, Fin Stabilized, Discarding Sabot-Tracer (APFSDS-T)

0

0

- (c) Targeting Sensor Subsystem.
- (d) Fire Control Subsystem.

Quantity of RDT&E Articles

The system will be deployed from the MH-60S helicopter and will provide organic airborne mine defense as part of Littoral Combat Ship (LCS) Mine Warfare Mission Module. This capability will be of critical importance in littoral zones, confined straits, choke points, and the Amphibious Objective Area (AOA).

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Acquisition Workforce;	0.098	0.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy			DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				PROJECT 2473: Airborne Mine Neutralization System			
B. Accomplishments/Planned Program (\$ in Millions)							
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2009 Accomplishments: Acquisition Workforce							
AMNS: Hardware/Software Development		2.307	2.515	1.305	0.000	1.305	
FY 2009 Accomplishments: Develop logistics products, including training materials and i engineering support, including review for product development and integration.							
FY 2010 Plans: Develop logistics products, including training materials and i engineering support, including review for product developme and integration.							
FY 2011 Base Plans: Develop logistics products, including training materials and i engineering support, including review for product development and integration.							
AMNS: Test Events		3.029	4.621	2.785	0.000	2.785	
FY 2009 Accomplishments: Conduct Regression Testing prior to re-entry MH-60S TECH	IEVAL.						
FY 2010 Plans: Complete MH-60S TECHEVAL.							
FY 2011 Base Plans: Conduct MH-60S OPEVAL. Support testing on untethered L	HS.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604373N: Airborne Mine Countermeasures (AMCM)		PROJECT 2473: Airbo	System		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
AMNS: Program Management		0.164	0.229	0.383	0.000	0.383
FY 2009 Accomplishments: Provide Program Management support and travel for AMNS.						
FY 2010 Plans: Provide Program Management support and travel for AMNS.						
FY 2011 Base Plans: Provide Program Management support and travel for AMNS.						
AMNS: Engineering		0.000	0.000	1.831	0.000	1.831
FY 2011 Base Plans: Develop hardware and software for untethered LHS.						
RAMICS: Hardware/Software Development		3.856	2.605	5.925	0.000	5.925
Hardware and Software technology development and demonstration	/Engineering Services.					
FY 2009 Accomplishments: Continue engineering associated development and demonstration/E	Engineering Services					
FY 2010 Plans: Continue engineering associated development and demonstration/E	Engineering Services					
FY 2011 Base Plans: Continue engineering and software development associated with G Collection Testing.	un Qualification test and Pod Data					
RAMICS: ILS and Engineering		4.645	0.093	0.119	0.000	0.119

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: Febr	ruary 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604373N: Airborne Mine Countermeasures (AMCM)		PROJECT 2473: Airborne Mine Neutralization Sys			
B. Accomplishments/Planned Program (\$ in Millions)	,					
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Integrated Logistics Support						
FY 2009 Accomplishments: TDA support of ILS Program, to include training, documentati updates.	on updates, and tech/maintenance					
FY 2010 Plans: TDA support of ILS Program, to include training, documentati updates.	on updates, and tech/maintenance					
FY 2011 Base Plans: TDA support of ILS Program, to include training, documentati updates.	on updates, and tech/maintenance					
RAMICS: Engineering and Test Events		4.766	5.716	1.372	0.000	1.372
Test and Evaluation of Gun Fire on the MH-60S and impacts of	on the airframe.					
FY 2009 Accomplishments: Conduct Initial Gun Fire and Static LIDAR Data Collection.						
FY 2010 Plans: Conduct Initial Gun Fire and Static LIDAR Data Collection.						
FY 2011 Base Plans: Final Engineering analysis of MH-60S Helicopter impact from and NAVAIR Structures engineers coordination and analysis.						
RAMICS: Program Management		0.966	4.247	2.877	0.000	2.877

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R-1 Line Item #104 Page 36 of 64

Exhibit R-2A, RDT&E Project Justif	fication: PB	2011 Navy							DATE: Feb	ruary 2010	
APPROPRIATION/BUDGET ACTIVIT 1319: Research, Development, Test of BA 5: Development & Demonstration	& Evaluation	, Navy		PE 0604373	N: Airborne	Mine		PROJECT 2473: Airbo	rne Mine Ne	utralization	System
B. Accomplishments/Planned Prog	PE 0604373N: Airbor Countermeasures (Anthement & Demonstration (SDD) Imagement & Demonstration (\$DD) Imagement (\$ in Millions) Imagement (\$ in Millions)										
	•	,					FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Project Management											
FY 2009 Accomplishments: TDA Program Management, Fin Support	ancial Mana	gement, Co	ntract Manaç	gement, Test	and Contra	ctor					
FY 2010 Plans: TDA Program Management, Fin Support	ancial Mana	gement, Co	ntract Manaç	gement, Test	and Contra	ctor					
FY 2011 Base Plans: TDA Program Management, Fin Support	ancial Mana	gement, Co	ntract Manaç	gement, Test	: and Contra	ctor					
			Accomplish	ments/Plann	ed Program	s Subtotals	19.831	20.026	16.597	0.000	16.597
C. Other Program Funding Summa	ry (\$ in Milli	ions)									
Line Item	FY 2009	FY 2010			FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• OPN 4248 : Airborne MCM - AMNS					11.100	2.800	0.000	0.000	0.000	0.000	32.026
• WPN 4225/1: Airborne MCM - AMNS	8.551	4.439	18.936	0.000	18.936	22.427	43.802	59.701	45.053	0.000	202.909
OPN 1600: LCS Mission Modules WPN 4225/2: Airborne MCM -					2.800 0.000	2.800 0.000	2.800 12.354	3.000 18.464	3.000 6.118	0.000 0.000	17.222 36.936
RAMICS • PANMC 0196: MK 258 MOD - RAMICS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.010	3.065	0.000	6.075
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.207	6.176	0.000	12.383

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R-1 Line Item #104 Page 37 of 64

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

PROJECT R-1 ITEM NOMENCLATURE

FY 2012

1319: Research, Development, Test & Evaluation, Navy

C. Other Program Funding Summary (\$ in Millions)

PE 0604373N: Airborne Mine Countermeasures (AMCM)

2473: Airborne Mine Neutralization System

BA 5: Development & Demonstration (SDD)

FY 2011 **FY 2011 FY 2011** **Cost To**

Line Item

FY 2009 FY 2010

OCO Base

Total

FY 2013

FY 2014 FY 2015 Complete Total Cost

• WPN 4221: LCS MODULE

WEAPONS-RAMICS

D. Acquisition Strategy

AMNS:Following a successful completion if Regression Testing on MH-60S, the Navy will award four (4) additional LRIP units to Raytheon.

Following a successful OT on an MH-60S, FRP is planned for FY10. The Navy has awarded a sole source contract for BAE for Common Neutralizer procurements.

RAMICS: Achieved MS B in July 2002 and awarded SD&D contract in August 2002 based on a full and open competition. RAMICS LRIP Award will follow MS C and an FRP Award will follow FRPDR.

E. Performance Metrics

Successfully complete Operational Test (OT) and receive Full Rate Production Decision approval.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0604373N: Airborne Mine

2473: Airborne Mine Neutralization System

BA 5: Development & Demonstration (SDD)

Countermeasures (AMCM)

Product Development (\$ in Millions)

				FY 2	010	FY 2 Ba	2011 se	FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Hardware/Software Development1	C/TBD	Lockheed Syracuse, NY Not Specified	3.331	0.000		0.000		0.000		0.000	0.000	3.331	Continuing
Hardware/Software Development2	C/Various	Various VAR	3.359	0.000		0.000		0.000		0.000	0.000	3.359	Continuing
Hardware/Software Development3	WR	NSWC PC Panama City FL	2.275	0.000		0.135	Nov 2010	0.000		0.135	0.462	2.872	Continuing
Hardware/Software Development4	C/TBD	Raytheon Portsmouth RI	16.354	0.000		0.370	Nov 2010	0.000		0.370	2.310	19.034	Continuing
Untethered Hardware Development	C/TBD	TBD C/CPIF	0.000	0.000		0.849	Nov 2010	0.000		0.849	5.366	6.215	Continuing
Untethered Hardware Development	WR	NSWC PC Panama City FL	0.000	0.000		0.170	Nov 2010	0.000		0.170	1.076	1.246	Continuing
Hardware/Software Development5	C/TBD	Northrop Grumman, FL C/CPIF	32.852	2.030	Oct 2009	4.780	Nov 2010	0.000		4.780	1.000	40.662	Continuing
Hardware/Software Development6	WR	NSWC PC Panama City FL	2.892	0.000	Oct 2009	0.012	Nov 2010	0.000		0.012	1.010	3.914	Continuing
Hardware/Software Development7	WR	NSWC Crane Crane IN	2.470	0.000	Oct 2009	0.000	Nov 2010	0.000		0.000	0.000	2.470	Continuing
		Subtotal	63.533	2.030		6.316		0.000		6.316	11.224	83.103	

Remarks

BOTH AMNS and RAMICS

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0604373N: Airborne Mine

2473: Airborne Mine Neutralization System

BA 5: Development & Demonstration (SDD)

Countermeasures (AMCM)

Support (\$ in Millions)

				FY 2	2010	FY 2 Ba		FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Services	C/Various	Various VAR	3.300	0.000		0.000		0.000		0.000	0.000	3.300	Continuing
Engineering Services	WR	NSWC Panama City FL	20.550	1.572	Nov 2009	0.189	Nov 2010	0.000		0.189	0.643	22.954	Continuing
Engineering Services	C/CPIF	Raytheon Portsmouth RI	9.702	0.665	Nov 2009	0.138	Nov 2010	0.000		0.138	0.472	10.977	Continuing
Untethered Engineering Services	C/CPIF	TBD Not Specified	0.000	0.000		0.330	Nov 2010	0.000		0.330	0.995	1.325	Continuing
Untethered Engineering Services	WR	NSWC PC Panama City FL	0.000	0.000		0.330	Nov 2010	0.000		0.330	1.499	1.829	Continuing
ILS Functions1	WR	NSWC PC Panama City FL	4.797	0.194	Nov 2009	0.115	Nov 2010	0.000		0.115	0.392	5.498	Continuing
ILS Functions2	SS/CPFF	Lockheed Syracuse NY	0.227	0.000		0.000		0.000		0.000	0.000	0.227	Continuing
ILS Functions3	C/CPIF	Raytheon, Portsmouth RI	2.112	0.084	Nov 2009	0.033	Nov 2010	0.000		0.033	0.112	2.341	Continuing
Untethered ILS Functions	C/CPIF	TBD Not Specified	0.000	0.000		0.085	Nov 2010	0.000		0.085	0.229	0.314	Continuing
Untethered ILS Functions	WR	NSWC PC Panama City FL	0.000	0.000		0.085	Nov 2010	0.000		0.085	1.052	1.137	Continuing
Engineering Services	C/CPIF	Northrop Grumman Melbourne FL	14.269	0.532	Oct 2009	1.090	Nov 2010	0.000		1.090	1.500	17.391	Continuing
Engineering Services	WR	NSWC PC Panama City FL	9.934	0.043	Oct 2009	0.043	Nov 2010	0.000		0.043	1.500	11.520	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604373N: Airborne Mine Countermeasures (AMCM)

PROJECT

2473: Airborne Mine Neutralization System

Support (\$ in Millions)

				FY 2	010	FY 2 Ba	2011 ise	FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Services	WR	NSWC, Crane Crane, IN	2.777	0.000	Oct 2009	0.650	Dec 2010	0.000		0.650	0.100	3.527	Continuing
Engineering Services	WR	Various Various	2.557	0.000	Oct 2009	0.000		0.000		0.000	0.100	2.657	Continuing
ILS Functions4	SS/CPIF	Northrop Grumman Melbourne FL	6.370	0.000	Oct 2009	0.000		0.000		0.000	0.500	6.870	Continuing
ILS Functions5	WR	NSWC PC Panama City FL	1.510	0.093	Oct 2009	0.119	Nov 2010	0.000		0.119	1.000	2.722	Continuing
ILS Functions6	C/Various	Various Various	2.255	0.000	Oct 2009	0.000		0.000		0.000	0.100	2.355	Continuing
		Subtotal	80.360	3.183		3.207		0.000		3.207	10.194	96.944	

Remarks

BOTH AMNS and RAMICS

Test and Evaluation (\$ in Millions)

				FY 2	2010	FY 2 Ba	-	FY 20		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Test & Evaluation	Various/ Various	Various Various	0.300	0.000		0.000		0.000		0.000	0.000	0.300	Continuing
	WR	NSWC, PC	23.681	3.002	Nov 2009	0.000		0.000		0.000	0.000	26.683	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604373N: Airborne Mine Countermeasures (AMCM)

PROJECT

2473: Airborne Mine Neutralization System

Test and Evaluation (\$ in Millions)

				FY 2	2010	FY 2 Ba		FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Test & Evaluation		Panama City FL											
Development Test & Evaluation	SS/CPFF	Lockheed Martin Syracuse, NY	1.254	0.000		0.000		0.000		0.000	0.000	1.254	Continuing
Development Test & Evaluation	C/CPIF	Raytheon Portsmouth RI	6.907	0.924	Nov 2009	0.000		0.000		0.000	0.000	7.831	Continuing
Operational Test & Evaluation	WR	COTF Norfolk VA	1.388	0.000		2.260	Nov 2010	0.000		2.260	0.000	3.648	Continuing
Operational Test & Evaluation	SS/CPFF	Lockheed Syracuse NY	0.767	0.000		0.000		0.000		0.000	0.000	0.767	Continuing
Test Assets	C/CPIF	Raytheon Portsmouth RI	3.065	0.000		0.000		0.000		0.000	0.000	3.065	Continuing
Untethered Test and Evaluation	C/CPIF	TBD Not Specified	0.000	0.000		0.085	Nov 2010	0.000		0.085	0.559	0.644	Continuing
Untethered Test and Evaluation	WR	NSWC PC Panama City FL	0.000	0.000		0.085	Nov 2010	0.000		0.085	2.798	2.883	Continuing
Follow on Test and Evaluation	WR	NSWC PC Panama City FL	0.000	0.000		0.289	Nov 2010	0.000		0.289	0.987	1.276	Continuing
Follow on Test and Evaluation	C/CPIF	Raytheon Portsmouth RI	0.000	0.924	Nov 2009	0.066	Nov 2010	0.000		0.066	0.224	1.214	Continuing
Test & Evaluation	C/CPIF	Northrop Grumman Melbourne FL	10.948	3.103	Oct 2009	0.726	Dec 2010	0.000		0.726	0.750	15.527	Continuing
Test & Evaluation	WR	NSWC PC Panama City FL	5.313	2.613	Oct 2009	0.646	Dec 2010	0.000		0.646	0.750	9.322	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604373N: Airborne Mine

Countermeasures (AMCM)

PROJECT

2473: Airborne Mine Neutralization System

Test and Evaluation (\$ in Millions)

				FY 20	010	FY 2 Ba		FY 2	-	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Evaluation	WR	NSWC, Crane Crane IN	1.230	0.000		0.000		0.000		0.000	1.000	2.230	Continuing
Test & Evaluation	C/Various	Various Various	7.360	0.000		0.000		0.000		0.000	0.750	8.110	Continuing
Test & Evaluation	C/FFP	QinetiQ, UK	0.000	0.000		0.000		0.000		0.000	0.000	0.000	Continuing
		Subtotal	62.213	10.566		4.157		0.000		4.157	7.818	84.754	

Remarks

BOTH AMNS and RAMICS

Management Services (\$ in Millions)

	(+	,											
				FY 2	2010	FY 2 Ba		FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	C/Various	Various VAR	2.902	2.147	Nov 2009	2.877	Nov 2010	0.000		2.877	0.158	8.084	Continuing
Travel	C/TBD	NAVSEA PD	0.374	0.050	Nov 2009	0.040	Nov 2010	0.000		0.040	0.040	0.504	Continuing
Untethered Program Management	C/Various	TBD VAR	0.000	0.000		0.000		0.000		0.000	0.368	0.368	Continuing
Management Support	C/Various	Various Various	4.002	2.000	Oct 2009	0.000		0.000		0.000	0.800	6.802	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604373N: Airborne Mine

Countermeasures (AMCM)

PROJECT

2473: Airborne Mine Neutralization System

Management Services (\$ in Millions)

				FY 2	010	FY 2 Ba		FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Support	C/TBD	Travel PD	0.290	0.050	Oct 2009	0.000		0.000		0.000	0.100	0.440	Continuing
DAWDF	C/TBD	Not Specified Not Specified	0.098	0.000		0.000		0.000		0.000	0.000	0.098	Continuing
	•	Subtotal	7.666	4.247		2.917		0.000		2.917	1.466	16.296	

Remarks

BOTH AMNS and RAMICS

											Target
	Total Prior			FY	2011	FY 2	-	FY 2011	Cost To		Value of
	Years Cost	FY 2	2010	Ba	ase	00	co	Total	Complete	Total Cost	Contract
Project Cost Totals	213.772	20.026		16.597		0.000		16.597	30.702	281.097	

Remarks

BOTH AMNS and RAMICS

Exhibit R-4, RDT&E S	chedu	le Pr	ofile:	PB 2	2011	Navy																DA	TE: F	ebrua	ary 20	010		
APPROPRIATION/BU 1319: Research, Deve BA 5: Development &	lopmer	nt, Tes	st & E		ation,	Navy	′			PI	-1 ITE E 060 ounte	4373	N: <i>Air</i>	borne	e Min						JECT : Airb		Mine	Neuti	raliza	ntion S	Syste	m
						0.0	10				044							200	40				044			- 04	45	
Fiscal Year		20	009			20	10				011			20	12			20	13				014			20	15	
RAMICS	1	2	3	4	1	2	3	4	1	1 2	2 3	3 4	1	2	3	3 4	1	2	:	3 4	1	2	2 3	4	1	2	3	4
Acquisition Milestones	Syst	em De	velopr	ment a	nd De	monst	ration	_																				
Program Phases																	T											
Significant Events			Prog	am A	ssessi	nent			GLS	Softw	are De	velop	nent															
		5	oftwa	re Rec	uirem	ents V	erifica	tion					Mari	lalina														
	Mode	eling											IVIO	leling	ا] د	WSTIN	VI											
							Eng	gineerii	ng De	velop	ment					┦—										-		+-+
EDM Delivery																										Е	DMs 1	1&2 △
Test & Evaluation		Cont	ractor	Perfor	mance	Testi	ng (no	A/C)																				
Milestones					Fligh	Qual	ficatio	n Test	ing (C	aptiv	e Carria	age/J	ettison)														
			Abe	deen	LIDAF	Test)				Enve	op Val	idatio	n Gun	Fire T	esting											
			Initia	Gun	Fire T	sting																						
Production Milestones																												
LRIP																												
FRP																												
	l						ı	ı	ı	1			1	ı			1				1		1				ı	

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Exhibit R-4, RDT&E Schedule Profile:	PB 2	2011	Nav	У																	DA	TE:	Feb	ruary	201	0		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & E 3A 5: Development & Demonstration (S	Evalu	ation	, Nav	/y				PE	0604	4373I	DMEI N: <i>Aii</i> sures	rborn	ie Mi	ne				- 1	PRO. 2473:		Γ orne	Min	e Ne	utral	izatio	on Sy	/sten	n
Fiscal Year		20)09			20	10			20)11			20	112			20	13			20	014			20	115	
AMNS	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Acquisition Milestones											FRF	DR / I	ос 															
System Development			SD&	Ď													P3I											
Test & Evaluation Milestones						DI	Г МН-8	3O																				
Developmental Testing (DT) Operational Testing (OT)									ОТ																			
Production Milestones						M																						Ī
LRIP FRP						LRIP FY09 FY10						FRP																
Deliveries				_		1110						**				<u> </u>												
LRIP FRP				4													_											

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE**

PROJECT 1319: Research, Development, Test & Evaluation, Navy PE 0604373N: Airborne Mine 2473: Airborne Mine Neutralization System

BA 5: Development & Demonstration (SDD) Countermeasures (AMCM)

Schedule Details

	Sta	art	En	d
Event	Quarter	Year	Quarter	Year
AMNS SD&D Phase	1	2009	3	2010
AMNS Development Testing (MH-60s)	2	2010	3	2010
AMNS Operational Testing (MH-60s) Start	1	2011	1	2011
AMNS LRIP (FY09)	2	2010	2	2010
AMNS LRIP (FY10)	2	2010	2	2010
AMNS FRPDR	4	2011	4	2011
AMNS LRIP Deliveries Start	4	2009	4	2012
AMNS FRP Deliveries Start	1	2013	4	2015
AMNS P3I Development	3	2011	4	2014
RAMICS System Development and Demonstration (SD&D) Phase	1	2009	4	2013
RAMICS Program Assessment	2	2009	2	2009
RAMICS GLS Software	1	2011	2	2013
RAMICS Software Requirements Verification	2	2009	4	2010
RAMICS Modeling	2	2009	3	2012
RAMICS SIM/STIM	3	2012	4	2012
RAMICS Engineer Development Model (EDM) Units 1 & 2	4	2015	4	2015
RAMICS Contractor Performance Testing (no A/C)	1	2009	1	2009
RAMICS Flight Qualification Testing (Captive Carriage/Jettison)	3	2009	4	2009

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604373N: Airborne Mine

Countermeasures (AMCM)

PROJECT

2473: Airborne Mine Neutralization System

	St	art	End		
Event	Quarter	Year	Quarter	Year	
LIDAR Test	3	2010	4	2010	
Gun Fire Test	3	2010	3	2010	
Val Gun Fire Test	4	2011	3	2012	

Exhibit R-2A, RDT&E Project Just	ification: Pl	B 2011 Navy	1						DATE: February 2010				
APPROPRIATION/BUDGET ACTIV 1319: Research, Development, Test BA 5: Development & Demonstratio	opment, Test & Evaluation, Navy Demonstration (SDD) PE 0604373N: Airborne Mine Countermeasures (AMCM) Force							Tactics & Trr	ng Organic				
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost		
4026: Strat Into Medal, Tactics & Trng Organic Force	2.716	1.938	1.798	0.000	1.798	1.820	1.846	1.895	1.845	Continuing	Continuing		
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0				

A. Mission Description and Budget Item Justification

The C4I, Tactics, Mission Planning, and Post-Mission Analysis (CTMP) program began in FY97 as an initiative to provide near-real-time data linking of mine sensor data between the MH-53E aircraft and ship- and/or shore-based command centers. Additionally, the program began to develop MEDAL modules for each "Next Generation" system; and plans to develop "Next Generation" tactics; provide threat data and system requirements and capabilities to the MEDAL software development effort; and develop a common post-mission analysis tool for "Next Generation" systems.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
ACQUISITION WORKFORCE FUND	0.013	0.000	0.000	0.000	0.000
FY 2009 Accomplishments: Funded DoD Acquisition Workforce Fund.					
Hardware/Software Development	0.762	0.816	0.844	0.000	0.844
FY 2009 Accomplishments: Code core OPMA module					
FY 2010 Plans: Code system-specific OPMA Modules					
FY 2011 Base Plans: Code system-specific OPMA Modules					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: Febr	uary 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604373N: Airborne Mine Countermeasures (AMCM)		PROJECT 4026: Strat Into Medal, Tactics & Trng Orga Force						
B. Accomplishments/Planned Program (\$ in Millions)			,						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total			
Engineering Services/ILS:		1.765	1.007	0.849	0.000	0.849			
FY 2009 Accomplishments: Reachback Support for tactical employment of OAMCM systems									
FY 2010 Plans: Incorporate tactics lessons learned into TACMEMOs									
FY 2011 Base Plans: ILS planning for OPMA									
T&E Support Support for MEDAL/PMA		0.000	0.115	0.000	0.000	0.000			
FY 2010 Plans: T&E Support for MEDAL/PMA integration during WSIT CT and DT									
Management Support		0.176	0.000	0.105	0.000	0.105			
FY 2009 Accomplishments: MEDAL contractor management support to CTMP									
FY 2011 Base Plans: MEDAL contractor management support to CTMP									
Accomplis	shments/Planned Programs Subtotals	2.716	1.938	1.798	0.000	1.798			

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
1319: Research, Development, Test & Evaluation, Navy	PE 0604373N: Airborne Mine	4026: Strat Into Medal, Tactics & Trng Organic
BA 5: Development & Demonstration (SDD)	Countermeasures (AMCM)	Force

C. Other Program Funding Summary (\$ in Millions)

			<u>FY 2011</u>	<u>FY 2011</u>	<u>FY 2011</u>					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	<u>Base</u>	OCO	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
OPN 4248: Airborne MCM -	0.256	0.256	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.512
OPMA											

D. Acquisition Strategy

The Organic Post-Mission Analysis (OPMA) capability for the OAMCM systems will be developed by NSWC PC, Panama City, FL. The OPMA project will leverage existing system-specific developmental PMA software, maximize commonality, and host the software on a common shipboard computer. OPN funding will be used to procure ruggedized portable OPMA computers for ship of opportunity deployments, land basing, and training. Development of OAMCM-system-specific MEDAL modules will be performed by SAIC, McLean, VA. This effort will include post-test updates for the system-specific MEDAL modules to allow transition to a Fleet release. NSWC-PC will contract for this work on a time and materials basis. The tactics development, tactics training, and tactics algorithms/database efforts are performed by NSWC-PC. These efforts will provide reach back support as the OAMCM systems begin to be fielded; will develop modifications to environmental databases necessary to support OAMCM mission planning; will update the MIW Tactics Continuum to address OAMCM; and will update the gear and mine database for threats addressed by the OAMCM systems.

E. Performance Metrics

Successfully integrate CTMP into the fleet.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604373N: Airborne Mine Countermeasures (AMCM)

PROJECT

4026: Strat Into Medal, Tactics & Trng Organic

Product Development (\$ in Millions)

•	٠.	,											
				FY 2	010	FY 2 Ba	2011 FY 2 se OC			FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Hardware/Software Development	C/TBD	SAIC Not Specified	0.792	0.275	Nov 2009	0.844	Dec 2010	0.000		0.844	Continuing	Continuing	Continuing
Hardware/Software Development	WR	NSWC PC Panama City FL	2.044	0.541	Nov 2009	0.000		0.000		0.000	Continuing	Continuing	Continuing
		Subtotal	2.836	0.816		0.844		0.000		0.844			

Remarks

Support (\$ in Millions)

				FY 2	010	FY 2 Ba	-	FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Services	WR	NAVO Not Specified	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
Engineering Services	C/Various	Various VAR	0.595	0.282	Nov 2009	0.304	Nov 2010	0.000		0.304	Continuing	Continuing	Continuing
Engineering Services	WR	NSWC PC Panama City FL	2.023	0.560	Nov 2009	0.456	Nov 2010	0.000		0.456	Continuing	Continuing	Continuing
Engineering Services	C/TBD	BAE Not Specified	0.609	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
Engineering Services	C/TBD	SAIC Not Specified	0.331	0.000		0.089	Nov 2010	0.000		0.089	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)

PE 0604373N: Airborne Mine Countermeasures (AMCM)

4026: Strat Into Medal, Tactics & Trng Organic

Force

Support (\$ in Millions)

				FY 2	2010	FY 2 Ba	-	FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
ILS	WR	NSWC PC Panama City FL	0.745	0.165	Nov 2009	0.000		0.000		0.000	Continuing	Continuing	Continuing
		Subtotal	4.303	1.007		0.849		0.000		0.849			

Remarks

Test and Evaluation (\$ in Millions)

	. (4	,		= 1/0		FY 2		FY 2		FY 2011			
	Contract	Performing		FY 2	3010	Ва	se	OC	.0	Total			Target
Cost Category Item	Method & Type	Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Value of Contract
Test and Evaluation	WR	NSWC PC Panama City FL	0.040	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
		Subtotal	0.040	0.000		0.000		0.000		0.000			

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

R-1 ITEM NOMENCLATURE

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

PE 0604373N: Airborne Mine

Countermeasures (AMCM)

PROJECT

4026: Strat Into Medal, Tactics & Trng Organic

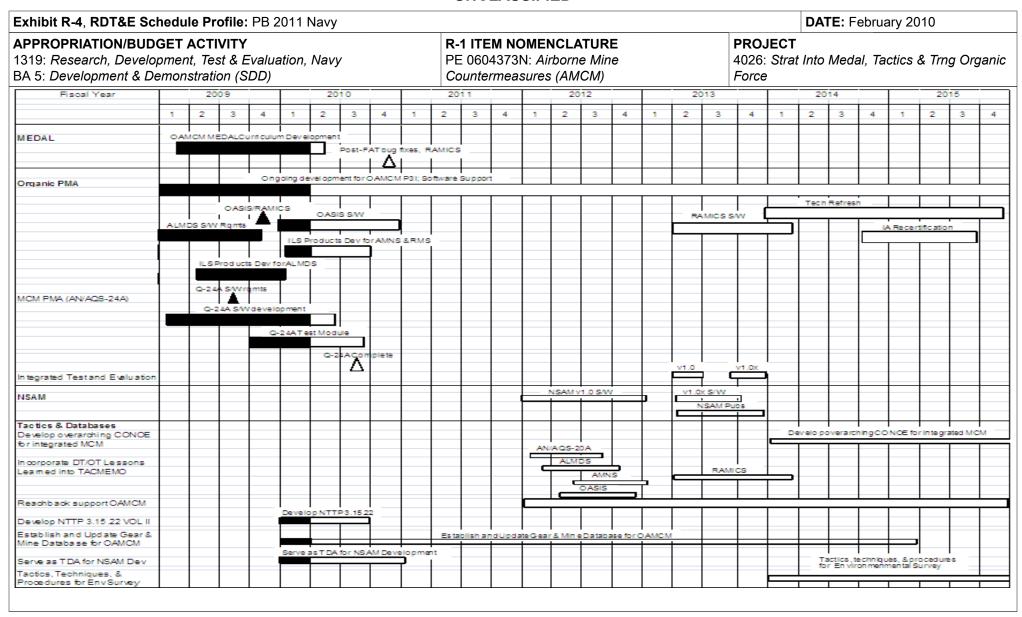
Management Services (\$ in Millions)

				FY 2	010	FY 2 Ba	2011 se	FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Support	WR	NSWC PC Panama City FL	0.687	0.090	Oct 2009	0.105	Dec 2010	0.000		0.105	Continuing	Continuing	Continuing
Management Support	C/TBD	SAIC Not Specified	0.083	0.025	Nov 2009	0.000		0.000		0.000	Continuing	Continuing	Continuing
Acquisition Workforce Fund	Various/ Various	Various Various	0.013	0.000		0.000		0.000		0.000	0.000	0.013	Continuing
		Subtotal	0.783	0.115		0.105		0.000		0.105			

Remarks

	Total Prior Years Cost	FY 2	010	FY 2	FY 2	-	FY 2011 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	7.962	1.938		1.798	0.000		1.798			

Remarks



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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy	DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0604373N: Airborne Mine	4026: Strat	Into Medal, Tactics & Trng Organic
BA 5: Development & Demonstration (SDD)	Countermeasures (AMCM)	Force	

Schedule Details

	Sta	art	Е	nd	
Event	Quarter	Year	Quarter	Year	
MEDAL: OAMCM Medal Curriculum Development	1	2009	2	2010	
MEDAL: RAMICS Post FAT Bug Fixes	4	2010	4	2010	
OPMA: Ongoing Development for P3I; Software	1	2009	4	2015	
OPMA: OASIS/RAMICS S/W	4	2009	4	2009	
OPMA: OASIS S/W	4	2009	4	2010	
OPMA: RAMICS S/W	2	2013	1	2014	
OPMA: Tech Refresh	1	2014	4	2015	
OPMA: ALMDS S/W Rqmts	1	2009	4	2009	
OPMA: IA Recertification	4	2014	3	2015	
OPMA: ILS Products Dev for AMNS & RMS	1	2010	3	2010	
OPMA: ILS Products Dev for ALMDS	2	2009	1	2010	
MCM PMA: Q-24A S/W Rqmts	3	2009	3	2009	
MCM PMA: Q-24A S/W Development	1	2009	2	2010	
MCM PMA: Q-24A Test Module	4	2009	3	2010	
MCM PMA: Q-24A Complete	3	2010	3	2010	
Integrated T&E: v1.0	2	2013	2	2013	
Integrated T&E: v1.0x	3	2013	4	2013	
NSAM: NSAM v1.0 S/W	1	2012	1	2013	

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604373N: Airborne Mine

Countermeasures (AMCM)

PROJECT

4026: Strat Into Medal, Tactics & Trng Organic

Force

	Sta	art	End		
Event	Quarter	Year	Quarter	Year	
NSAM: NSAM v1.0x S/W	2	2013	4	2013	
NSAM: NSAM Pubs	2	2013	4	2013	
Develop CONOE for Integrated MCM	1	2014	4	2015	
Develop NTTP 3.15.22 VOL II	1	2010	3	2010	
Gear & Mine Database for OAMCM	4	2009	1	2015	
Serve as TDA fo NSAM Development	1	2010	1	2011	
Tactics Techniques	1	2014	4	2015	

DATE: February 2010

Exhibit N-ZA, ND I &L Project 3us	uncauon. F	D ZUTT Mavy	'						DAIL. 1 60	luary 2010	
APPROPRIATION/BUDGET ACTIV 1319: Research, Development, Tes BA 5: Development & Demonstration	t & Evaluatio	n, Navy		PE 060437	IOMENCLA 3N: Airborne asures (AMO	Mine		PROJECT 9179: Surf	Navy Integ L	Indersea Tad	ctical Tech
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
9179: Surf Navy Integ Undersea Tactical Tech	0.666	0.955	0.909	0.000	0.909	0.926	0.923	0.943	0.964	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Exhibit R-24 RDT&F Project Justification: PB 2011 Navy

Surface Navy Integrated Undersea Tactical Technology (SNIUTT) will be used to develop an AN/SQQ-32, AN/AQS-14, AN/AQS-24, AN/AQS-20A and future OAMCM sensor training modules.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
ACQUISITION WORKFORCE FUND	0.003	0.000	0.000	0.000	0.000
FY 2009 Accomplishments: Funded DoD Acquisition Workforce Fund.					
Hardware and Software Development	0.552	0.826	0.773	0.000	0.773
FY 2009 Accomplishments: Development of an AN/AQQ-32, AN/AQS-14, AN/AQS-20A sonar training module. Also development of a Scenario Generator software system for REMUS for mine like contact recognition training and ALMDS training modules.					
FY 2010 Plans: Development of an AN/AQQ-32, AN/AQS-14, AN/AQS-20A sonar training module. Also development of a Scenario Generator software system for REMUS for mine like contact recognition training and ALMDS training modules.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: Feb	ruary 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604373N: Airborne Mine Countermeasures (AMCM)		PROJECT 9179: Surf	Navy Integ U	Indersea Tad	ctical Tech
B. Accomplishments/Planned Program (\$ in Millions)			1			
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: Development of an AN/AQQ-32, AN/AQS-14, AN/AQS-20A so of a Scenario Generator software system for REMUS for mine training and ALMDS training modules.	•					
Engineering and ILS Services		0.111	0.129	0.136	0.000	0.136
FY 2009 Accomplishments: SNIUTT In-Service Engineering Agent (ISEA) and developmer Warfare Center, Panama City (NSWC PC).	nt support is provided by Naval Surface					
FY 2010 Plans: SNIUTT In-Service Engineering Agent (ISEA) and developmer Warfare Center, Panama City (NSWC PC).	nt support is provided by Naval Surface					
FY 2011 Base Plans: SNIUTT In-Service Engineering Agent (ISEA) and developmer Warfare Center, Panama City (NSWC PC).	nt support is provided by Naval Surface					

Accomplishments/Planned Programs Subtotals

0.666

0.955

0.909

0.000

0.909

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy	DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
1319: Research, Development, Test & Evaluation, Navy	PE 0604373N: Airborne Mine	9179: Surf Navy Integ Undersea Tactical Tech
BA 5: Development & Demonstration (SDD)	Countermeasures (AMCM)	

C. Other Program Funding Summary (\$ in Millions)

			<u>FY 2011</u>	<u>FY 2011</u>	<u>FY 2011</u>					<u>Cost To</u>	
<u>Line Item</u>	FY 2009	FY 2010	<u>Base</u>	<u>000</u>	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
• OPN 4248: Airborne MCM -	0.120	0.120	0.120	0.000	0.120	0.300	0.300	0.306	0.312	0.000	1.578
SNIUTT											

D. Acquisition Strategy

Surface Navy Integrated Undersea Tactical Technology (SNIUTT) has been used to develop an AN/SQQ-32, AN/AQS-14, AN/AQS-24 and AN/AQS-20A sensor training modules. Funds will continue to support training for these four sonar systems, as well as training for the REMUS sonar systems and other OAMCM systems in the same format as previous training. The SNIUTT sensor training modules will be developed by NSWC PC, Panama City, FL, in association with Advanced Acoustic Concepts (AAC), Ronkonkoma, NY. NSWC PC will contract with AAC for this work under a Cost Plus Fixed-Fee (CPFF) scenario. Funds are being provided for development and delivery of refresher scenario based contact recognition training, and the update and modification of contact recognition training (interactive web based training and proficiency focused stand-alone training) in support of the SNIUTT program.

E. Performance Metrics

Successfully integrate SNIUTT into the school house training facility.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604373N: Airborne Mine Countermeasures (AMCM)

PROJECT

9179: Surf Navy Integ Undersea Tactical Tech

Product Development (\$ in Millions)

				FY 2011 FY 2010 Base			FY 2011 FY 2011 OCO Total						
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Hardware Software Development	WR	NSWC PC Not Specified	0.549	0.830	Oct 2009	0.773	Oct 2010	0.000		0.773	0.000	2.152	Continuing
		Subtotal	0.549	0.830		0.773		0.000		0.773	0.000	2.152	

Remarks

Support (\$ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
ISEA	WR	NSWC, PC Panama City FL	0.114	0.125	Oct 2009	0.136	Oct 2010	0.000		0.136	0.000	0.375	Continuing
		Subtotal	0.114	0.125		0.136		0.000		0.136	0.000	0.375	

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604373N: Airborne Mine

Countermeasures (AMCM)

PROJECT

9179: Surf Navy Integ Undersea Tactical Tech

Management Services (\$ in Millions)

				FY 2	010	FY 2 Ba	-	FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
DAWDF	WR	Not Specified Not Specified	0.003	0.000		0.000		0.000		0.000	0.000	0.003	Continuing
		Subtotal	0.003	0.000		0.000		0.000		0.000	0.000	0.003	

Remarks

	Total Prior Years Cost	FY 2010		2011 ise	FY 2	-	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.666	0.955	0.909		0.000		0.909	0.000	2.530	

Remarks

DATE: February 2010

		,									
APPROPRIATION/BUDGET ACT 1319: Research, Development, Te BA 5: Development & Demonstrat	st & Evaluatio	n, Navy		PE 060437	NOMENCLA 3N: Airborne asures (AMO	Mine		PROJECT 9999: Congressional Adds			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
9999: Congressional Adds	1.995	2.390	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.327
Quantity of RDT&F Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

9A39A - AMCM Open Architecture Technology Insertion Congressional Add - In support of Airborne Mine Countermeasure (AMCM) systems, this initiative will provide open systems migration of unique military standard sensors, electronics, and software system components to lower cost/higher performance commercial equivalent capabilities. This effort will develop and accelerate an Open Architecture Multi-static Technology Insertion solution for the Navy's Airborne Mine Countermeasures Program. The anticipated result is lower cost/higher performance equivalent capabilities based on open architecture software and hardware components.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010
Congressional Add: Common Air Mine Countermeasures Tow Cable	0.000	2.390
FY 2010 Plans: Common Air Mine Countermeasures Tow Cable - (Congressional Add); In support of Airborne Mine Countermeasure (AMCM) systems, this initiative will design/develop a common tow cable for the Airborne Mine Counter Mine (AMCM) Systems to the unique military standard sensors, electronics, and software system components for a lower cost/higher performance commercial equivalent capabilities.		
Congressional Add: AIRBORNE MINE COUNTERMEASURES OPEN ARCHITECTURE TE FY 2009 Accomplishments: 9A39A - AMCM Open Architecture Technology Insertion Congressional Add - In support of Airborne Mine Countermeasure (AMCM) systems, this initiative will provide open systems migration of	1.995	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0604373N: Airborne Mine	9999: Cong	ressional Adds
BA 5: Development & Demonstration (SDD)	Countermeasures (AMCM)		

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010
unique military standard sensors, electronics, and software system components to lower cost/higher performance commercial equivalent capabilities. This effort will develop and accelerate an Open Architecture Multi-static Technology Insertion solution for the Navy's Airborne Mine Countermeasures Program. The anticipated result is lower cost/higher performance equivalent capabilities based on open architecture software and hardware components.		
Congressional Adds Subtotals	1.995	2.390

C. Other Program Funding Summary (\$ in Millions)

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Congressional adds.